



Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A temperature control system in a thermal device,
comprising: equipped with
an electrical supply network,
a frequency converter connected to the electrical supply network by a
disconnecting device,
a temperature sensor,
resistance heating elements connected to an output of the frequency converter
by a first contactor, and
a motor-driven cooling gas blower connected to the output of the frequency
converter by a second contactor,
a temperature controller on which both of the latter connected through
contactors to the output of a frequency converter supplied from electrical supply network
through a disconnecting device, with temperature progress in a thermal process for the
thermal device is programmed and on a temperature controller which controls the frequency
converter, unique in that
wherein the frequency converter modulates effective voltage supplied to the
resistance heating elements and supplied to the motor-driven cooling gas blower,
wherein the output of the frequency converter (F) is simultaneously connected
through the first contactor (SG) to at least one heating system incorporating that includes the
resistance heating elements, and through the second contactor (SD) to at least one cooling
system with that includes the blower and a blower 3-phases induction motor (MD), and

_____ wherein the first and second contactors (SG and SD) beingare controlled by the temperature controller (RT).

2. (Currently Amended) ~~Temperature~~ The temperature control system as peraccording to claim 1, ~~unique in that~~ further comprising a transformer between the first contactor (SG) of the heating system and the resistance heating elements (R) ~~there is a transformer~~ (TR).

3. (Currently Amended) ~~Temperature~~ The temperature control system as peraccording to claim 1, ~~unique in that~~ further comprising a transformer between the second contactor (SD) of the blower and the blower motor (MD) ~~there is a transformer~~ (TRD).

4. (Currently Amended) ~~Temperature~~ The temperature control system as peraccording to claim 1, ~~unique in that~~ it is most advantageous to have the wherein a rated current of the heating and cooling systems ~~maintain the~~ maintains a ratio of 0.33 – 3.

5. (Currently Amended) ~~Temperature~~ The temperature control system as peraccording to claim 1, ~~unique in that~~ it is most advantageous to have the wherein a rated voltage of the heating and cooling systems ~~maintain the~~ maintains a ratio of 0.33 – 3.